ELSEVIER

Computer Physics Communications 98 (1996) 415–416

Computer Physics Communications

Contents to volume 98

Computational physics

Goldfield, E.M. and S.K. Gray
Mapping Coriolis-coupled quantum dynamics onto parallel computer architectures 1

Avdeev, Leo.V.
Recurrence relations for three-loop prototypes of bubble diagrams with a mass 15

Fischer, S., A. Frommer, U. Glässner, Th. Lippert, G. Ritzenhöfer and K. Schilling
A parallel SSOR preconditioner for lattice QCD 20

Berg, B.A.
New algorithm to investigate neural networks 35

Kisel, I. and V. Kovalenko
Elastic net for broken multiple scattered tracks 45

Dirl, R., K. Payer and B.L. Davies
Symmetrized plane waves: 1. symmorphic space groups 52

Dirl, R., K. Payer and B.L. Davies
Symmetrized plane waves: 2. symmetrized $Pm\bar{3}m$-plane waves 73

Dirl, R., K. Payer and B.L. Davies
Symmetrized plane waves: 3. nonsymmorphic space groups 83

Dirl, R., K. Payer and B.L. Davies
Symmetrized plane waves: 4. symmetrized $Pm\bar{3}n$-plane waves 98

Hoogland, J.K. and R. Kleiss
Discrepancy-based error estimates for Quasi-Monte Carlo I. General formalism 111

Hoogland, J.K. and R. Kleiss
Discrepancy-based error estimates for Quasi-Monte Carlo II. Results in one dimension 128

Atanasiu, C.V., A. Moraru and A.A. Subbotin
Improvement of the moments method for MHD equilibrium calculation in a divertor tokamak configuration 137

Stapleton, D.P.
Numerical simulation of a rigid rotating body by Obrechkoff integration 153

Maley, D., P.L. Kilpatrick, E.W. Schreiner, N.S. Scott and G.H.F. Diercksen
The formal specification of abstract data types and their implementation in Fortran 90: implementation issues concerning the use of pointers 167

Towler, M.D., A. Zupan and M. Causà
Density functional theory in periodic systems using local Gaussian basis sets 181

Dietz, H., M. Braun, C. Meier and V. Engel
Addendum to: Nanosecond wave-packet propagation with the split-operator technique [Comput. Phys. Commun. 93 (1996) 152] 265

Olson, K.M.
Efficient tree codes on SIMD computer architectures 267

Parkes, E.J. and B.R. Duffy
An automated tanh-function method for finding solitary wave solutions to nonlinear evolution equations 288

Khanfir, R., G. Chanteur and J.P. Croisille
Resolution of the system of equations of ideal magnetohydrodynamics by a finite volume kinetic-type method 301

Irisa, M.
An elegant algorithm of the analytical calculation for the volume of fused spheres with different radii 317

Computer programs in physics

Montagna, G., O. Nicrosini and F. Piccinini
NUNUGPV – A Monte Carlo event generator for $e^+e^- \to \nu\bar{\nu}\gamma(\gamma)$ events at LEP 206

Vámosi, J. and S. Biri
TrapCAD – a program to model magnetic traps of charged particles 215

Kruger, A.
Implementation of a fast box-counting algorithm 224

Zatsarinny, O.
A general program for computing matrix elements in atomic structure with nonorthogonal orbitals 235

Gaigalas, G. and C. Froese Fischer
Extension of the HF program to partially filled *f*-subshells 255

Trunec, D., J. Dřímal and M. Vičar
A subprogram for direct solution of Poisson equation in cylindrically symmetric geometry 339

Kobus, J., L. Laaksonen and D. Sundholm
A numerical Hartree–Fock program for diatomic molecules 346

Ankudinov, A.L., S.I. Zabinsky and J.J. Rehr
Single configuration Dirac–Fock atom code 359

Dasgupta, I., A.R. Levi, V. Lubicz and C. Rebbi
QCDF90: a set of Fortran 90 modules for a high-level, efficient implementation of QCD simulations 365

Kaeding, T.A. and H.T. Williams
Program for generating tables of $SU(3) \supset SU(2) \otimes U(1)$ coupling coefficients 398